REMARKS

Status Summary

In this Amendment, no claims are cancelled, and claims 65-78 are added. Therefore, upon entry of this Amendment, claims 1-78 will be pending.

Claim Rejections 35 U.S.C. § 102

Claims 1, 6-8, 11-18, 22-26, 29, 35, 48, 49, 51-59, and 61-64 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,304,565 to Ramamurthy (hereinafter, "Ramamurthy"). This rejection is respectfully traversed.

The present invention, for example as claimed in independent claims 1, 11, 22, 29, 35, 42, and 51 includes methods and systems for automatically updating presence information stored in a presence database or for obtaining information from such a database. The claims have been amended to clarify that presence information is information useable by a presence server for automatically indicating to other end users who are subscribed to a target end user in a presence database a communication medium for contacting the target end user using a text messaging protocol and indicating that the target end user is currently available to receive messages via the text messaging protocol. For example, as described on page 4 beginning at line 14 of the present specification, the presence protocol may be used as follows:

> A typical example of how the presence protocol may be used is as follows. An entity A to an endpoint E may be subscribed through a

presence server P to another entity B. When the status of B changes, P will notify E of the change in status of B.

The present invention includes methods and systems for automatically updating such information in a presence database (independent claims 1, 22, 29, and 42) and obtaining such information from a presence database (independent claims 11, 35, and 51).

Ramamurthy has absolutely nothing to do with the presence protocol, registering presence information in a presence database, or responding to presence queries. Ramamurthy is directed to methods for processing telephone calls when a called party's telephone line is busy because the called party is accessing the Internet using his or her telephone line. (See column 1, lines 34-40 of Ramamurthy.) According to Ramamurthy, an incoming call to a called party whose telephone line is busy because the called party is using the telephone line to access the Internet can be processed in a number of ways:

> If the telephone line is active, IP-telephony-capable, currently active on an IP telephony call, and the called party subscribes to a call waiting on IP feature, then the incoming call can be forwarded as an IP telephony call to the called telephone line if the called party agrees to accept the incoming call and places his current call on hold. If the called party does not subscribe to a call waiting on IP feature but subscribes to a call forwarding on IP feature, the incoming call can be directed to an alternate destination on either the IP network or the PSTN, such as a voice mail or message service. If the called party is currently active on the IP network, has an IP telephony capability, but is not currently active on an IP telephony call, which is the common scenario when the called party is browsing, then the called party is alerted to the incoming telephone call via a message on his terminal. The called party can then elect to accept the incoming call and the call is completed through the ITN to the called party as an Internet telephony call regardless of whether or not the called party subscribes

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to a call waiting on IP feature. If the called party is currently active on the IP network through an ISP, but does not have an IP telephony capability, then the PSTN can forward a message to the ISP which will push the message to the called party and inform him of the incoming call. (See column 2, lines 22-45 of Ramamurthy.)

Thus, Ramamurthy discloses several methods for processing calls when the called party telephone line is being used for Internet activities. There is no mention of automatically generating presence registration messages or processing queries to a presence database as claimed. Thus, for this reason alone, the rejection of claims as anticipated by Ramamurthy should be withdrawn.

Moreover, paragraph 3 of the Official Action indicates:

Ramamurthy discloses...

(a) receiving a signaling system 7 (SS7) message in response to a telephony related action performed by an end user (Figure 2, column 4, lines 51-52);

(b) determining based on the SS7 message, whether presence registration processing is required for the end user (column 4, lines 52-57);

(c) in response to determining that presence registration processing is required for the end user, automatically generating a presence registration message including presence information indicating to other end users for contacting the end user using a messaging protocol and indicating that the end user is available to receive message protocol messages via the communications medium (Figure 3, column 5, lines 56-51); and

(d) transmitting the presence registration message to the presence server over an IP network (Figure 1, column 3, lines 41-43).

The portions of Ramamurthy cited by the Examiner fail to teach the invention as claimed.

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With regard to step (a) of claim 1, Figure 2 and column 4, lines 51-52 of Ramamurthy cited in the Official Action regarding step (a) describe the action of the calling party dialing the called party's telephone number. In contrast, step (a) of claim 1 has been amended to recite receiving a signaling system 7 message in response to a telephony related action performed by a target end user to which other end users are subscribed in a presence database. In other words, claim 1 relates to an action performed by the end user seeking to be contacted, rather than the calling party.

Step (b) of claim 1 recites determining, based on the SS7 message, whether presence registration processing is required for the end user. Column 4, lines 52-57 of Ramamurthy cited in the Official Action regarding step (b) of claim 1 states as follows:

> At step **202**, the PSTN **104** receives the dialed number over the SS7 signaling network. At step **203**, the PSTN **104** accesses database **112** through telephone server **111**, which is commonly accessible from ITN **100** and PSTN **104**, to determine, at step **204**, if the telephone line identified by the dialed number is currently active on a packet-based data network.

The cited portion of Ramamurthy states that a database is accessed to determine whether the called party's line is busy. There is no teaching or suggestion of determining whether presence registration processing is required. As indicated in claim 1, presence information includes information usable by a presence server for automatically indicating to other end users who are subscribed to the end user in a presence database a communication medium for contacting the end user via a text messaging protocol. There is simply no such teaching in Ramamurthy.

Step (c) of claim 1 recites:

in response to determining that presence registration processing is required for the end user, automatically generating a presence registration message including presence information usable by a presence server for automatically indicating to other end users who are subscribed to the end user in a presence database a communication medium for contacting the end user via a text messaging protocol and indicating that the end user is currently available to receive text messaging protocol messages via the communications medium.

Figure 3 and column 5, lines 59-61 of <u>Ramamurthy</u> cited in the Official Action regarding step (c) of claim 1 recite various options for processing an incoming telephone call if the called party is busy on the IP network. For example, lines 59-61 of column 5 in <u>Ramamurthy</u> state that the call may be forwarded to a messaging system (i.e., a voice messaging system). The only similarity between this passage and step (c) of claim 1 is the common term "messaging," which was most likely located in a keyword search by the Examiner. However, forwarding a call to a voice mail system as disclosed in <u>Ramamurthy</u> fails to even remotely suggest updating presence information in a presence database that indicates to other end users as to how to contact the target end user via a text messaging protocol. For example, instructions for forwarding a call to an Internet-based voice mail system are usable by the network for forwarding phone calls, whereas presence information is usable by end users for contacting the target end user via a text messaging protocol.

Step (d) of claim 1 recites transmitting the presence registration message to the presence server over an IP network. Column 3, lines 41-43 of <u>Ramamurthy</u> cited in the Official Action regarding step (d) of claim 1 recites:

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> ITN **110** cooperatively operates with a telephone server **111** for the
> purposes of call setup, call control and call completion. In addition, a
> database **112** is connected to a telephone server **111**, in which a list
> of currently active users on ITN **110** is maintained.

There is no disclosure in the above-quoted passage or in Figure 1 of <u>Ramamurthy</u> of

routing a presence registration message to a presence server. This passage, in

combination with Figure 1, merely lists different call forwarding options usable by the

network to forward calls when the called party telephone line is busy. Such

information is not presence information as claimed in the independent claims of the

present application.

Thus, because <u>Ramamurthy</u> fails to teach or suggest the invention as claimed

in the independent claims of the present application that relate to automatic presence

registration (claims 1, 22, 29, and 42), the rejection of these claims and their

respective dependent claims should be withdrawn.

With regard to claims 11-15, 35 and 51-59, the Official Action states:

> <u>Ramamurthy</u> discloses a method for completing long distance POTS
> calls with IP telephony endpoints comprising:
>
> (a) receiving, at a presence registration and routing node, an IP
> message for determining presence information for a first end user, the
> presence information indicating a communication medium for
> contacting the first end user using a messaging protocol and the fact
> that the first end user is currently available to receive messaging
> protocol messages via the communications medium (Figures 2-5,
> column 5, lines 59-61 and column 5, lines 64-67).

Column 5, lines 59-61 of <u>Ramamurthy</u> cited in the above-quoted passage from the

Official Action states, "the called party is then given the option at step **210** to forward

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the incoming call to a messaging system." Column 5, lines 64-67 of <u>Ramamurthy</u>

cited in the above-quoted passage from the Official Action states:

> If the called party at step **210** does not elect to send the call to a messaging system, then at step **212** the call is terminated in a messaging system at which the called party can leave a message.

The quoted passages of <u>Ramamurthy</u> relate to forwarding an incoming call to voice

mail. These passages are not even remotely related to receiving a query for

presence information for a target end user to which other end users are subscribed in

a presence database.

With regard to paragraph (b) of claim 11, the Official Action indicates that

column 4, lines 23-45 of <u>Ramamurthy</u> disclose this element. Paragraph (b) of claim

11 recites formulating a query to a presence database for obtaining the presence

information. Column 3, lines 23-45 of <u>Ramamurthy</u> states as follows:

> Database **112** has stored their own information associated with each end user currently logged on to ITN **110**. Specifically, when a user terminal logs on to ITN **110**, he identifies himself with the user ID. In addition, the user is prompted for the telephone number from which the connection is being established, or that telephone number may be provided to the ITN via an automatic number identification (ANI) provisioning through LEC **106**. Further, database has stored therein information indicating the subscribe to IP telephony feature set associated with the subscriber/user at the called telephone number, such as call forwarding on IP and call waiting on IP. When the end user at terminal **108** logs on to ITN, therefore, a record is created in database **112** which indicates the user's telephone line number, the user's ID and the IP telephony feature set associated with that user, and the fact that the identified telephone line is active on the IP network. The record indicates whether or not that telephone line is currently active on an IP telephony call. If the called telephone line is

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active on the IP network but not currently active on the IP telephony call, then the user is either keeping his terminal idle or is browsing on the Internet or an Intranet.

The above-quoted passage of Ramamurthy states that database **112** stores information indicating whether the called end user is active on the Internet, is capable of receiving an IP telephony call and the IP telephony features to which the user subscribes. Nothing about this passage teaches or suggests formulating a query to a presence database because database **112** does not store presence information. Presence information is claimed in the independent claims of the present application as information usable by a presence server for automatically indicating to end users subscribed to a target end user in a presence database as to how to contact the target end user via a text messaging protocol. Such information is not conventionally kept by PSTN networks. In contrast, Ramamurthy indicates alternate ways for processing calls when a called party line is busy, which is a common feature in PSTN networks.

Step (c) of claim 11 recites obtaining presence information from the presence database. The Official Action again indicates that column 4, lines 23-45 discloses obtaining presence information from the presence database. This is the same passage of Ramamurthy that the Official Action cites as relevant to step (b) of claim 11. As indicated above, this portion of Ramamurthy merely recites alternate methods for contacting an end user whose telephone line is busy. There is no teaching or suggestion of obtaining presence information.

The Official Action indicates that Figure 2 and column 6, lines 10-22 of Ramamurthy disclose step (d) of claim 11. Step (d) of claim 11 recites forwarding the presence information to a second end user and wherein the second end user uses the presence information to determine the appropriate communication medium for contacting the target end user using a text messaging protocol and the availability of the target end user to receive text messaging protocol communications via the communications medium. Column 6, lines 10-22 of Ramamurthy recites:

> If, in step **204**, the called telephone line is determined to be active on an IP telephony call but a determination was made at step **205** that a call waiting on IP telephony feature is not associated with the called party, then at step **213**, a determination is made whether the called party subscribes to call forwarding on IP feature. If not, at step **214**, telephone server **111** signals PSTN **104** to return a busy signal to the calling party. If a call forwarding feature on IP is associated with the called telephone line, then, at step **215**, the incoming call can be directed to an adjunct **120** or **121** as previously described. Alternatively, the called party can direct the call to be forwarded to an alternate destination on either the ITN or PSTN, such a cellular telephone.

The quoted portion of Ramamurthy merely indicates different options for processing an incoming telephone call in response to features to which the called party subscribes. In contrast, step (d) of claim 11 recites forwarding presence information to an end user that the end user can use to contact the target end user via a text messaging protocol. Ramamurthy does not teach forwarding any information back to the calling party. Rather, Ramamurthy teaches different call processing operations performed by the network.

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Thus, for all of the reasons stated above, Ramamurthy fails to teach or even remotely suggest the invention claimed in the independent claims of the present application that relate to processing presence queries (claims 11, 35, and 51) or their respective dependent claims. Thus, the rejection of these claims should be withdrawn.

Claim Rejections 35 U.S.C. § 103

Claims 2-4, 9, 10, 18-21, 23, 27, 28, 30-34, 36-41, 43-45, 47, 50 and 50 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ramamurthy in view of U.S. Patent No. 5,999,525 to Krishnaswamy et al. (hereinafter, Krishnaswamy). This rejection is respectfully traversed.

As stated above, the present invention relates to methods and systems for automatically generating presence registration messages based on telephony actions and for responding to queries for presence information, where the presence information is usable by a presence server to automatically indicate to end users subscribed to the target end user in a presence database that the target end user is accessible via a text messaging protocol. For all of the reasons stated above, Ramamurthy fails to teach such methods and systems.

Krishnaswamy likewise fails to teach anything remotely related to the claimed invention. Krishnaswamy is directed to a method for sending telephone calls and multimedia information across the Internet. There is no mention in Krishnaswamy of the presence protocol, automatically generating presence information in response to a PSTN action, or processing presence protocol queries. In direct contrast to the

present invention, Figure 57 of Krishnaswamy cited by the Official Action as relevant

to the claims of the present application indicates that a user must manually update

his or her own IP telephony profile via a login screen. This profile is usable by the

network, rather than other end users, to complete IP telephony calls to the called

party. Thus, for these additional reasons, it is respectfully submitted that a

combination of Ramamurthy and Krishnaswamy teaches away from the claims the

present application that relate to automatic presence registration in response to a

PSTN action.

On page 4 and 5 of the Official Action, the Examiner indicates that

Krishnaswamy discloses certain SS7 messages, such as IAM messages and TCAP

messages. Figure 1F and column 93, line 21 of Krishnaswamy are indicated in the

Official Action as disclosing an initial address message. Column 93 beginning at line

17 of Krishnaswamy states as follows:

> The hybrid Internet telephony switch **221** grows out of the marriage of
> router architectures with the circuit switching architecture. A call
> arriving on the PSTN interface **257** is initiated using (ISUP) signaling,
> with an initial address message (IAM) containing a called party
> number and an optional calling party number. The PSTN interface
> transfers the IAM message to the host processor. The host processor
> examines the PSTN network interface of origin, the called party
> number and other IAM parameters, and selects an outgoing network
> interface for the call. The selection of the outgoing network interfaces
> made on the basis of routing tables. The switch **221** may also query
> external service control point (SCP) **276** on the Internet to request
> routing instructions. Routing instructions, whether derive locally on
> switch **221** or from the STP **276**, may be defined in terms of a subnet
> to reach a particular destination. (See column 93, lines 17-33 of
> Krishnaswamy.)

The above quoted passage of Krishnaswamy cited by the Examiner indicates the traditional use of the IAM message, i.e., for call setup. In contrast, dependent claim 2 in combination with step (a) of claim 1 of the present specification recite updating presence information in a presence database in response to an IAM message relating to a call made by the target end user. Thus, the present invention takes an IAM message, which is conventionally used for call setup, and uses it for a completely different purpose of updating presence information. There is simply no such teaching in Ramamurthy or Krishnaswamy. Thus, for this additional reason, the rejection of the claims that relate to using conventional PSTN signaling to update presence information should be withdrawn.

Claims 5 and 46 were rejected as unpatentable over Ramamurthy in view of U.S. Patent No. 5,373,930 to McConnell et al. (hereinafter, "McConnell"). This rejection is respectfully traversed.

Claim 5 depends from claim 1 and claim 46 depends from claim 42. As stated above, Ramamurthy fails to teach the invention claimed in independent claims 1 or claim 42. McConnell likewise lacks such teaching or suggestion. McConnell is directed to a call monitoring system that maintains subscriber account balance information, such as prepaid financial account balance or a usage amount that the subscriber is not allowed to exceed, in an SCP. The SCP provides instructions for routing calls through a special service node that plays announcements, performs call timing, collects digits, and disconnects the call as necessary, in accordance with the subscriber's account balance. (See column 4, lines 37-64 of McConnell.) Such

accounting information has nothing to do with the presence protocol. Nonetheless, on page 6, the Official Action indicates that McConnell's disclosure of an HLR renders claims 5 and 46 obvious in combination with Ramamurthy. The cited portion of McConnell is as follows:

> A home location register **134** is conventionally coupled by a signaling path **136** with STP network **116**. HLR **134** serves standard functions in the wireless network, such as managing profiles and authentication information for subscribers in mobile stations. HLR **134** is typically located on an SCP operated by the home service provider of a record for a given subscriber. In addition, network **100** typically includes a visitor location register ("VLR"), which stores the service profile information for mobile stations currently being served by the carrier operating SCP **124**. The VLR may be maintained on the MSC on the SCP, or at another suitable location. (See column 11, lines 52-63 of McConnell.)

The cited portion of McConnell merely state the conventional uses of an HLR and a VLR, that is, storing subscriber profile information and information regarding the subscriber's current location. In contrast, the invention claimed in claims 4 and 49 recite that activation of a mobile handset triggers a message to an HLR, which is also used for presence registration. Using a message that was traditionally used only for HLR registration for presence registration is simply not taught by McConnell. Thus, for this additional reason, the rejection of claims 4 and 49 should be withdrawn.

Claim 5 has been rewritten in independent form to include automatically updating presence protocol information in a presence database based on a signaling system 7 message sent in response to a telephony-related action by a mobile subscriber. The signaling system 7 message is sent to update the status of the

target end user in an HLR or VLR. Thus, in independent claim 5, a signaling system 7 message relating to mobile call signaling is used for a new purpose to update presence information in a presence database.

There is no teaching or suggestion in <u>Ramamurthy</u> nor <u>McConnell</u> of this method. As stated above, <u>Ramamurthy</u> is directed to an Internet call forwarding system that provides information <u>to the network</u> rather than end users for contacting a party whose telephone line is busy due to Internet access. <u>McConnell's</u> only teaching of messages between HLRs and VLRs relate to standard functions performed by these nodes, i.e., storing subscriber information. There is no teaching or suggestion in either of these references, when taken individually, or when combined of updating presence protocol information based on an SS7 message used to update the status of a subscriber in an HLR or a VLR. Accordingly, it is respectfully submitted that the rejection of claim 5 should be withdrawn.

New Claims

New dependent claims 65-78 are added. Claims 65, 67, 69, 71, 73, 75, and 77 relate combining SS7 signal transfer functionality with presence registration and processing functionality. These claims are supported, for example by Figure 3 of the present application and page 11, lines 12-14 of the present specification.

New dependent claims 66, 68, 70, 72, 74, 76, and 78 recite that the text messaging protocol over which the target end users can be contacted is an instant

messaging protocol. Support for these claims is found, for example, on page 5, line 19 – page 6, line 11 of the present specification.
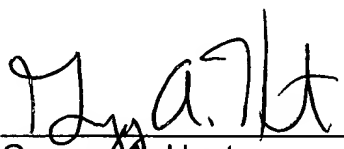
CONCLUSION

In light of the amendments and remarks above, it is respectfully submitted that the claims are now in condition for allowance. <u>If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.</u>

Although no fee is believed to be due, the Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. **50-0426**.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

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